

Building Act, continued.—  
 Builders' society and referees, 323; building near dangerous manufacturing, 129  
 District surveyor, late Mr. Allen, 311, 376; doubtful points in  
 Erections on roofs—curious case, 199  
 Fees, district surveyors', 341, 357, 363, 387, 419.—a pretty specimen, —363  
 Informations under: magistrates and referees, 323; in Greenwich, 63  
 Master carpenters and, 34, 79, 107, 131; materials of walls—caution, 316  
 Proceedings at Metropolitan Buildings Office—difference of opinions, 477  
 Referees and magistrates, 376; restitution of openings to new party walls, 416; revision of metropolitan, 337; ruinous buildings, 399  
 Walls, thickness of inclosure, 37  
 Buildings: arrangement of, for central inspection, 313; effect of frost on, 36, 143; fire proof, 208, 334; laws of sound in, 92, 109, 116, 139, 144; protection of, from lightning, 190; state of law on—amendment of 7 of buildings act, 337.  
 Hurch Castle, 393  
 Rural: grounds abroad, 327; in towns, 79, 139, 174, 186, 210, 251, 444, 450, 459, 499

## C

CAIRNG, panorama of, 137  
 Cambridge: cost of carriage ways in, 174; public club chamber scheme, 183, 199  
 Canoes, shell, manufacture of, 309  
 Canal, Helder, 49; works, Ac., Dutch, 113  
 Canterbury: conventual buildings at, Professor Willis on, 131; cathedral porch, 133; new synagogue at, 474, 481  
 Capitals of renaissance period, 142  
 Cardiff: roosty and town-hall competition, 347, 418, 439  
 Carliale: schools in, 359; progress in, 604  
 Car-wake: theatre burnt, 127; new theatre, 393, 394  
 Carlton Club-house, new, 214  
 Carpenters: Becclesford restoration, 353; Buildings Act and master, 34, 79, 107, 131; joiners' work and valuation of, 309; Society of Master, 313  
 Carpentery, bad, trial for, 464  
 Carston pierce group, 331  
 Carved: bench ends, 343; house, Stratford-on-Avon, 354; impost, Ipswich, 348; pen-ends, 563  
 Carvers and masons: eccliological, 35  
 Carving by machinery, 108  
 Castles, modern, 367  
 Cathedral: Antwerp, 197; Huges, 335; Chester, 396; Chichester, 182; Durham, 138, 173, 359, curious discovery in, 560; Ely, 376.—porch, 376.—Willis on, 364.—works in, 364; Glasgow, 197; Hereford, 253, 317; Llandaff, 19; Lincoln, 341; St. Andrew's, 317; Norwich, 366, 460, 541; porch at Canterbury, Salisbury, Lincoln, 317, Ac., 133; St. Andrew's, Sydney, 514; Wells, 61  
 Cathedral-church of S. Maria del Fiore at Florence, 356, 561, 563  
 Cauden, German Knight, 87  
 Caxton testimonial, proceedings, Ac., 265, 319  
 Cellia: Benvenuto, memoirs of, 67  
 Cement: Martins', 37; new, 311  
 Cement, lime, mortars, Ac. Pauley's work on, reviewed, 371  
 Cemeteries: Clarendon Hill, 281  
 Cemeteries: deposits in, 363; disinfection of, 413; caution in cleaning, 372  
 Chalk fuel, 79, 187  
 Chalons-sur-Marne, church at, 74  
 Chambord, palace of, 365, 374  
 Chantrey bequest, 356  
 Chapel, new, independent, at Manchester, 150  
 Chapel: St. Ann's, Farnham, New Brunswick, 248  
 Chart of ancient armour, 474  
 Charter-house, London, 379  
 Chatham, 132  
 Chertford new Roman church, 343  
 Churches: 313; sanitary matters in, 368  
 Chemistry as applied to construction, by Professor Griffiths, 43, 69, 95, 119, 134  
 Chester: 37; sewers in, 345;—cheap sort, 379; cathedral, 396  
 Chichester Cathedral restoration, 199  
 Chimney-pieces, Gothic, stone, 367  
 China: art and industry in, 77; buildings of, 183, 360; church in, 413; English building in, 47, 498; improvements in, 36  
 Chinese: architecture, 141; boring of Artesian wells 370; masons and carpenters, union of, 318; old, art and industry, 365  
 Christ Church, Priory Church, 567  
 Church: Aisle, 394; Bath, St. Mary Redcliffe, 153; Bedford St. Catharine's, 343, 311; Buryington, 360; St. Peter's on Wall, Bradford, 34; Notre Dame, Chalons-sur-Marne, 374; Roman, at Chelmsford, 343; Priory, Chichester, 367; Elystone, Gloucester, 311; Highbury, 36; Hildesheim, 391; St. Andrew's, 379; All Saints, East Ham, 43; St. Paul's, Wall, 333; All Saints, Hutton, 134; Holy Sepulchre, Jerusalem, 320; St. Mark, Kingsholm, Gloucester, 417, 468; new, at Kimberley, 360; St. Andrew's, London, 437; Lusk, County Dublin, destruction of, 78; St. Philip, Leeds, 340; Sydney, 333; Manchester Parish, 367; new, at Northampton, 389; Barnham, 178; St. Andrew's, Marylebone, 41; Protestant, Mount Zion, 187; Northfleet, 167; new Roman, Sheffield, 61; St. Mary Blenheim, Favers, 239; St. John Baptist, Southover, 149; Steyney, 461; new Roman, Stratford, 602; Tisbury, 156, 319; Tisbury, 331; St. Stephen's, Walsbrook, deplorable state of, 773, 791, 387; Ware, restoration of, by Mr. Godwin, 413, 514; St. Stephen's, Westminster, 347; St. Matthew's, Walsbrook, 378; St. Thomas's, Winchester, 317; Yarmouth, 363, 311  
 Church: architecture and ritual, 773  
 Church building, 363, 341.—communities, 33, 53.—societies, diocesan, 319  
 Church-extension in St. Pancras, 331  
 Church, Freeman's of, new Freeman's  
 Church, new: effect of frost on, 36  
 Church-rules at Rochester, 19  
 Church, spherical, 321  
 Churches: Bethnal-green, 464; City, destruction of, 174, 190; Coventry, 373; European, dimensions of, 68, 199; 319, 336, 379, 391; metropolitan, 446, 93; new, and ritual, 363; Norwich, 366, 470, 361; orientation of, 679, 493, 497, 564, 531  
 Churches and chapels, 343  
 Churches and schools, association, 318  
 Clay: churches, destruction of, 174, 190; improvement, 460, (see also "Metropolis," Ac.)  
 Civil Engineering, work on (see Cray)  
 Civil Engineers: Colleges, Farnley, education, 348  
 Civil Engineers, Institution of, 13, 34, 48, 79, 99, 114, 138, 161, 180, 204, 223, 347, 353, 393, 317, 339, —rooms, 44, 114  
 Classical art, 19  
 Clay: for architectural purposes, 343; chemical remarks on, 184; cottages built of, 130, 398; walls, 319, 336, 313, 364

Cleekwell, 341; St. John's gate, 268  
 Clerks of works, pay, Ac. of, 133  
 Cloisters, Walling Abbey, Kent, 267  
 Club-chambers, public, 183, 196  
 Club-house, Carlton, new, 318  
 Club-house, size of rooms in, 397  
 Cobble, electrical power, 132  
 Coin deposits, look to them, 377, 381, 403, 466  
 Coun. new, by Wyke, 347, 367  
 Cologne: canopy and statue, 37; Louvre, 110; dome, 363  
 Colonnade, Quadrant, removal of, 346, 359  
 Combustion, products of, 168  
 Compensation for "good-will," 336  
 Competing architects, 173  
 Competition: abroad, 323; Army and Navy Club, see "Army;" bulking trade, 615; Cardiff county hall, 343, 418, 439; city union workhouse, 338, 371; German memorial, 439; Highgate Church, 81; Imperial Assurance Office, 31; Kensington workhouse, 73, 98, 109; Mechanic's Institution, Ipswich, 69, 49, 121, 130; Manchester Lunatic Hospital, 193; Morgan testimonial, 143, 169; Parn-lenders' Almshouse, 323; Plymouth borough prisons, 490; Scarborough Church, 131, 399; Sheffield Athenaeum, 160; Swansea town hall, 311; Teynol town hall, 131, 310; York workhouse, 390  
 Competition of artists at Westminster hall, 510  
 Competition for architectural rural hall, see under Architecture  
 Competition: designs for cottages, 336; for Dalton Literary Institution, 13, 39, 31; for terminus at Newhaven, 259  
 Competition-plans, 173  
 Competition-tenders, present system of, 399  
 Competitions: architectural, evils of, decisions, 373; current, 90; mismanagement and reform of, 233  
 Competitors, reform for, 37, 47  
 Concentric-radiative form of buildings, for complete and simultaneous inspection, 313  
 Concrete, opinion on, 411  
 Concrete masses, use of, 516  
 Constantinople: British embassy, 194; decorations of St. Sophia, 461; fire in, 462  
 Construction: of cheap sewers—Chester and Manchester, 330; chemistry as applied to, see "Chemistry;" design and, 320; fire-proof strong rooms, 367; lighthouse, Havana, 377; lunatic asylums, 363; maxims in, by Professor Donaldson, 461; of paragon-houses, by late Mr. Alfred Bartholomew, 461; of prison, 483  
 Constructive sciences at King's College, 317  
 Contractors: liability of, 367; treatment of, 497  
 Conway Castle, notes on, 481  
 Copper, tin, Ac., 331  
 Cottages: clay, 330; competition designs for, 336; labourers', 40.—improvement of, 399  
 Cottingham, late Mr. architect, 498, 502  
 County: court comforts, 233; courts, 379; lunatic asylum, Surrey, 379  
 Covent Garden Opera-house described, 163, 337  
 Coventry: mysteries, 361; churches, 379; ancient street architecture in, 398  
 Cray's Encyclopaedia of Civil Engineering: engineer C. architect: contents: illustrations, 117  
 Cromwell: 221; in Channel islands, 469  
 Curves of fire, 461; of iron, 461  
 Cylinders, pressure of, problem on, 607; solution of, 610  
 Cylindrical pipes, casting of, 373

## D

DALSTON Literary Institution, competition designs for, 11, 39, 13, 33  
 Dance, George, architect, sketch of life of, 353  
 Death in St. James's, 77  
 Deane, R. Kearns, architect, 379  
 Decorative Art Society, 36, 191, 216, 377, 334, 365, 424, 331, 339  
 Decorative art, premiums for, 348  
 Decorative painting, sketches of, reviewed, 431  
 Deconation: ancient church, 360; drawing room, 393; furniture and, 375; knot in, 499; interior, art in, 38; Raphael's style of, 132; and scenery of theatre, 318; lighting the stage, 381; of Covent Garden theatre, 377; of Drury-lane theatre, editor's account of, 465, 366; of French Opera-house, 434; of Lyceum, history of site, plan, Ac., 499, 366; of railway stations, 34  
 Decorations: Cornish marble for, 496; mural—St. German L'Auxerrois, Paris, 9  
 Decorations, Act of Society of Arts, 114, 115; at Ironmongers' Hall, 240; at St. Paul's, 73, 313; in leather, 459; in London, Paris, and Constantinople, 163; in mosaics, 330, 337; of palace of Blinds and Chambord, 363, 374  
 Dee, failure of iron girder bridge over: see under "Bridge."  
 Design: architectural school of, 100, 160; and construction, 320; in architecture, 320; Birmingham school of, 394; Government school of, 360, 367, 439, 473;—important changes in, 323, 381; Sheffield Government school of, 437, 481; for labourer's cottage, 348; lectures at school of, 461; observations on, 366; schools of, 479, 239, 346,—value of, 341  
 Designs: architectural premiums for, 343  
 Destroyers: English built, 333  
 Diorama, Regent's-park, 166  
 Disinfecting Agents: 301; see also "Compost."  
 Dock: dry, at Malta, 30; store of iron, 34  
 Doctate: ancient church, ruins at, 13, 69, 113, 156, 178, 211; town-hall, 319  
 Door: knockers, 327; Norman, 316  
 Doorway: early, in Ely Cathedral, 495; Norman, 479  
 Dove, construction of harbour at: commission proceedings: materials: opinions: evidence of Mr. Godwin and others, 411, 474  
 Drainage: Ipswich, 77; St. James's, 77; Manchester—cheap sewers, 438  
 Drain-tubes, egg-shaped, 607  
 Drains to Oxford, 19  
 Drawings: architectural, Paris exhibition, 498  
 Draughtsman, gallery, 18  
 Drilling Machines, rack, 367, 366  
 Drury-lane Theatre: see "Decorations"  
 Durham Cathedral, 138, 173, 251; curious discovery in, 360  
 Dwellings: improvement of, 296; middle class, 369; working class, 341

## E

EARTHWORK, tables reviewed, 309  
 Eastlake, Mr. and the National Gallery, 66  
 Ecclesiastical: architecture, 100; medieval structures: see "Gothic."  
 Eccliological carvers and masons, 34  
 Eccliological (The) on squared stone, 483  
 Edinburg Commercial Bank, house, 711; Queen's Drive, 313; National Monument, 379; want of houses in, 473; works in, 380  
 Editor's address: on opening and closing volume—objects and fulfilment—realized and increasing countenance—future improvement: see pp. 1 and 669  
 Education, measures and reports on, 399

Egypt, granite quarries of, 323, 361  
 Electricity: as power on rails, 349; lighting by, 494  
 Electric fire and thermostat, 353  
 Electro-telegraphic: sketch of, reviewed, 343; history of, 366  
 Electro-telegraphic progress, 13, 31, 113, 133, 137, 146, 310, 390, 377, 399, 401, 366, 333, 366, 369, 517  
 Electroscope in wind-mills, 393  
 Elliptic, graduation of, 373  
 Ely Cathedral alterations, 266; porch, 370; early doorway, 493; Willis on, 364; works in, 361  
 Employers and workmen, 381  
 Enamelling metals, 18, 399  
 Enamels, Laminates, 357  
 Encaustic tiles, 133  
 Engraving: of brasses, Ac., 663; mezzotint, 103  
 Engine, new gas, 377  
 Engineering: Belgian medal to Mr. Weir for publications on, 283; Cray's Encyclopaedia of, see "Cray;" machinery of, and of machinery, works on, reviewed, 318, 379  
 Engineering-works, cast-iron in, 319; see also "Bridge-girders"  
 Engineers: see "Civil;" government, 347, 393; mechanical, at Birmingham, 329; Railways Guide, reviewed, 496; survey, and fees in, 369  
 Engravings, reproducing, 619  
 Epson clock-tower and engine-house, 447  
 Estimates, builders', 33; see also "Builders"  
 Estimating system: starting differences: effects, Ac., 361  
 Euse: College Chapel, old paintings in, 333; proposed removal of tower of, 184  
 Exchange: Antwerp, 456; Birmingham, 78  
 Exhibition: Adelaide Institute, 329; Art-Union, 391, 403; art, Louvre, 360; fine art, Berlin, 181; Vienna, 314; London Mechanic's Institution, 311; Royal Academy, 313, 321; Society of Arts, 194; Society of British Artists, 159; Westminster-hall, 299, 309, 343, 353, 367; (see also, of St. Paul's, 366.—"dirt cheap" compared with Peterborough, 353  
 Exhibitions: art, free for people, 213, 233, 361; water-colour, 363

## F

FINE-ART anatomy, work on, reviewed, 150  
 Fine-arts: and London Mechanic's Institution, 437; drains in, Providence Institution of, 379; exhibition at Beefein Academy, 16  
 Fine arts, Institute of, 191, 610, 259  
 Fire arts, science and mathematics, 394, 406  
 Fire, prevention of, at Rheims, 457  
 Fireproof: buildings, constructor of, 204, 334, 316; sales, 381; strong rooms, construction of, 367  
 Fire and fire-engines, management of, 610  
 Fires, supply of water in, 129  
 Fishmongers and Poulterers' Institution, 30  
 Flaxman, 371  
 Floor, ancient, in Mississippi, 377  
 Floors, granite, 435  
 Florence: church of S. Maria del Fiore: facade designs and Institute of Architects, 350, 361, 563; Duomo of, 391; 611  
 Fluids, law of, under pressure, 317  
 Foot: race, carved, 433, 542; in St. John's Church, London, 461  
 Foreign architectural and collateral intelligence in most of weekly numbers  
 Foreign architectural books, list of, 463  
 Forging chains for Turks, 233  
 Forms for utensils from leaves, 501  
 Foundations, setting in, 496  
 Foundation, 458  
 Freeman's asylum, 318  
 Freeman's of church, 33, 122, 317, 399, 398, 505, 614  
 French goods, 329  
 French polishing, 366  
 French, ancient, 377  
 Frost, effect of, on building, 16  
 Fuel: chalk for, 37, 79, 187; heat without, 73; new, 511; peat for, 91.—Irish, 604; steam power without, 108  
 Fulcrum, want of, by rail, 160  
 Furnace: brick burning, 379; improvements, 459  
 Furniture and decoration, 373

## G

GALLERY, old English, 39  
 Gallery, Sir R. Peel's new, at Drayton Manor, 18  
 Galloway, 360; works, 463  
 Gandon, James, architect: life of, 1  
 Gas: 360; engine, new, 377; illuminative, from animal matter, 151; time, use of, 341; lighting, some results of, 17  
 Gas: 360; 39, 64, 79, 84, 103, 190, 137, 148, 151, 175; at Liverpool: gas for nothing? 106; local projects, 173; new a national question, 320, 357; retrospects and prospects, 378; unpurities of gas and improvement of meters, 233; metropolitan, 790; preparation for a better state of things, 348, 355; in forthcoming Parliament, 366  
 "Coping crystals, Ac." 419; miscellaneous notes, 446, 503; monopoly priviledge in Commons, 356; miscellaneous notes, 570; lectures and meetings, 604  
 Gas tax, alleged levy of, 640  
 Gas, power of, in deep water, 363  
 Gatehouse, on, by Mr. Britton, 361  
 Gates: carriage, to open, 31, 318; dock, iron, 34  
 Geology, work on, reviewed, 223  
 Geometric proportions of ancient Gothic churches, 387  
 Geometric system of medieval architects, 300, 233; the inquiry and its importance—work on, 393; system continued, 416, 426  
 Geometrical square, regular in architecture, 170  
 Gemmetry, elements of, reviewed, 466; of the square, 367, 379, 467, 353; practical: construction of plane figures, 368  
 Gherard, Gothic well in, 74  
 Gilding, metals, 367  
 Girders: beams, wrought-iron, construction of, 376; iron, 66.—experiments on form of, 503, 612; large railway, 363; see also under "Bridge"  
 Glasgow Cathedral, 187  
 Glass: 78, 79, 101, 103, 167; British, 360,—sheet, in windows, 350; devoted to new purposes, 173; French plate, 79; formation of, 78; further novelties in, 332; greenhouse, 331; malleable, 466; ornamental, 467; painting, Charnwood, 158,—work on, reviewed, 343,—in England, retardation of, 390; see 603; plate, 459; sheet, 317; silica and chemical, 156; stained, 36, 43, 60, 161, 190, 323,—at Hampton Court, 35; vibration of, prevented, 347; trade, 443, 331, to remove, from old windows, 460, 339; use of, 393  
 Glazing cast-iron surfaces, 16  
 Gloucester: old house, 18; church of St. Mark, 437, 464; Elystone church, 81  
 Godwin, George, F.R.S., painter  
 Gosport, new marine barracks, 44  
 Gothic: chairs, German, 37; churches, geometric proportions of ancient, 287,—see also "Geometric;" groups, 237; remarks, 480; staircase at Antwerp, 31; stone, 363, 367; style from Romanesque, 363; well in Ghent, 74